

Model Number
EX603C10

LOW-COST INDUSTRIAL ICP® ACCELEROMETER

Revision: NR
ECN #: 52852

Performance	ENGLISH	SI	
Sensitivity(± 20 %)	10 mV/g	1.02 mV/(m/s ²)	[1]
Measurement Range	± 500 g	± 4,905 m/s ²	
Frequency Range(± 3 dB)	30 to 600,000 cpm	0.5 to 10,000 Hz	[2]
Resonant Frequency	1,500 kcpm	25 kHz	[3]
Broadband Resolution(1 to 10,000 Hz)	2,000 µg	19,620 µm/sec ²	[3]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	5,000 g pk	49,050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[3]
Enclosure Rating	IP68	IP68	
Electrical			
Settling Time(within 1% of bias)	≤ 3.0 sec	≤ 3.0 sec	[3]
Discharge Time Constant	≥ 0.4 sec	≥ 0.4 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	< 150 Ohm	< 150 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	85 µg/√Hz	834 (µm/sec ²)/√Hz	[3]
Spectral Noise(100 Hz)	20 µg/√Hz	196 (µm/sec ²)/√Hz	[3]
Spectral Noise(1 kHz)	5 µg/√Hz	49.1 (µm/sec ²)/√Hz	[3]
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm	
Physical			
Size (Hex x Height)	11/16 in x 4.7 in	18 mm x 119 mm	
Weight(without cable)	1.8 oz	51 gm	
Mounting Thread	1/4-28 Female	1/4-28 Female	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	Molded Integral Cable	Molded Integral Cable	
Electrical Connection Position	Top	Top	
Cable Length	10 ft	3.0 m	
Cable Type	Polyurethane	Polyurethane	[6]

OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

M - Metric Mount

Supplied Accessory: Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)

TO - Temperature Output

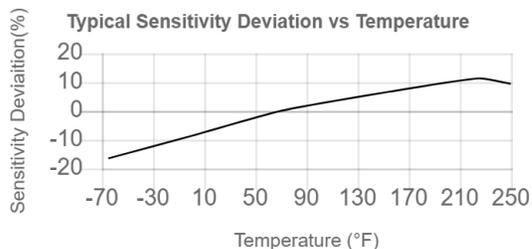
Temperature Output Range	36 to 250 °F	2 to 121 °C
Temperature Scale Factor	5.56 mV/°F + 32	+10 mV/°C
Electrical Connections(Red)	Acceleration Output	Acceleration Output
Electrical Connections(Black)	Ground	Ground
Electrical Connections(White)	Temperature Output	Temperature Output
Electrical Connections(Green)	Ground	Ground

NOTES:

- [1] Conversion Factor 1g = 9.81 m/s².
- [2] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [3] Typical.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] Twisted shielded pair.
- [7] See PCB Declaration of Conformance PS023 or PS060 for details.

SUPPLIED ACCESSORIES:

- Model 081A40 Mounting Stud
- Model ICS-2 NIST-traceable single-point amplitude response calibration at 6000 cpm (100 Hz) for each axis (1)
- Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)



All specifications are at room temperature unless otherwise specified.
In the interest of constant product improvement, we reserve the right to change specifications without notice.
ICP® is a registered trademark of PCB Piezotronics, Inc.

Entered: ND	Engineer: gs	Sales: JL	Approved: BAM	Spec Number:
Date: 05/18/2022	Date: 05/18/2022	Date: 05/18/2022	Date: 05/18/2022	76532

IMI SENSORS
A PCB PIEZOTRONICS DIV.
3425 Walden Avenue, Depew, NY 14043

Phone: 800-959-4464
Fax: 716-684-3823
E-Mail: imi@pcb.com